

Croplands

1992

During 1992, the first major conversion of agricultural ground took place. Five hundred acres of currently farmed ground are being turned back into native local ecotype vegetation. This represents a significant step as the Refuge begins the journey towards its goal of restoring/ reconstructing the prairie ecosystem at WNT.

Crop ground remaining on WNT totals 1,847.60. Crop ground for purposes of this report will include only those acres used for corn or soybean production. This ground is in predominately two types of row crop, soybeans and corn. In addition to the row crop acres, there are a large number of acres that are in a grass cover, either hay or in the Conservation Reserve Program. It is intended that this ground will be converted to native vegetation as soon as is practical. This will depend on the amount of seed available to plant these acres to the native local ecotype vegetation.

Production on the row crop acres resulted in 36,758.28 bushels of soybeans produced on 855.8 acres and 139,449.30 bushels of corn produced on 1,085.0 acres in 1992. Under the crop share system used by WNT, with the crop being split 2/3 cooperators and 1/3 Refuge, WNT's share of the crop was valued at \$143,000.00

The final touches to the crop management plan are being finished and should be completed before the end of March, 1993.

It is important to remember that the goal of WNT is to eliminate the farming activity within its boundaries. While trying to phase out farming, we are also trying to minimize the impact on the local economy. This has proven to be a challenge since we are trying to phase out this activity within the next 7 to 10 years.

1993

Major changes occurred in WNT's farming plan in 1993. the biggest change was the shift from crop share to a cash rent system to simplify the administration of the program. Since WNT is mandated to convert the existing cropland to native vegetation, this system offered several advantages.

The cash rent system was designed to minimize the risk to Cooperators and still keep the rent within the general range for this area. The rent was determined using the existing yield data for each tract within the Refuge boundary. The average price per bushel of corn and the cash rent guidelines established by the Jasper County Extension Office. The resulting rent figures fell at the lower end of the cash rent scale used by Jasper County's SCS office. Rent was paid in two installments, first 30% due in May, the remainder due in November. Total payment was based on the ASCS Planted Acres Report. The

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Cooperators were satisfied with the resulting rent. Average rent for farming WNT crop units was \$65.00 per acre, with a range of \$60 to \$71. This does not reflect the \$8 per acre they were required to pay for the crop scouting service.

Another change in the farming program included mandatory planting of buffer strips along gullies, waterways and streams. The buffer strip was required to be 100 feet on either side. Seed consisted of a mixture of grasses: Kentucky Bluegrass, Timothy, Red Clover, with oats added to give quick coverage for these areas. The seed was provided to the Cooperators and planted after regular crop planting was completed. The buffer strips accounted for approximately 136 acres converted from row crops to permanent cover.

A change from using anhydrous ammonia to liquid nitrogen was initiated, an adjustment made for operator safety and to lessen the impact on soil micro-organisms. The results were mixed, with some reluctance by the Cooperators. The cost for this form of nitrogen is higher; however, this is offset by savings in fuel and equipment costs. Liquid nitrogen is applied during the same pass as the herbicide application resulting in less soil compaction.

The last major change was a requirement to use a crop scouting service on all Refuge crop units. A firm was contracted by the Prairie City Farmers Cooperative and Refuge Cooperators paid \$8 per acre directly to the Prairie City Co-Op. This cost was offset when figuring the use fee for the unit. The overall success of the firm hired by the Prairie City Co-Op was not very good. We had complaints of late reports and sloppy, insufficient information. Unfortunately the complaints didn't surface until after the growing season was over. The Co-Op has agreed to find a different firm in 1994 and hopefully we will have a better program.

The total of row crops on the Refuge for 1993:

Corn – 1231.1 acres

Soybeans – 760.3 acres

Total --- 1992.1 acres

1993 proved to be a trying year for the agricultural community in the Midwest. Record rainfall washed planted fields away or inundated them. Many farmers were faced with fields that would have been more suitable for growing rice than corn and beans. The Refuge Cooperators encountered the same obstacles. In general, fields were planted late and in some cases, had to be replanted because the seed washed out. The record amounts of rain and cool weather took its toll in the crop. Harvests yielding 50% of average were the norm. Refuge Cooperators fared a little better than many due to the higher elevations of the Refuge units.

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The cooler, wetter weather was favorable to vigorous weed growth and poor weed control. The Refuge made a slight adjustment in the use fee due to the inability to get units planted.

1994

The cash rent system continued to be used for cropland at WNT. This system is designed to yield a fair return to the government and still keep rent within the general range for this area. Rental rates were determined using the existing yield data for each tract within the Refuge boundary, the average price per bushel of corn, and the cash rent guidelines established by the Jasper County's SCS office. Rent was paid in two installments, the first 30% due in May, the remainder due in November. Final payment was based on the ASCS Planted Acres Report. Average rent for farming WNT crop units was \$65, with a range of \$60 to \$71. This does not reflect the \$8 per acre they were required to pay for the crop scouting service.

Liquid nitrogen continued to be used as an alternative to anhydrous ammonia. The cost for this form of nitrogen is higher than for other forms; however, this cost is offset by savings in both fuel and equipment costs. Liquid nitrogen is applied during the same pass as the herbicide application, resulting in less soil compaction. Detrimental effects upon soil micro-organisms are also minimized by using liquid nitrogen.

Integrated pest management (IPM) continued to be used at WNT. Due to several complaints from Cooperators in 1993, a new crop scouting firm was contracted by the Prairie City Farmer's Cooperative. Crop Scouting was utilized on all Refuge crop units. Refuge Cooperators paid \$8 per acre directly to the Prairie City Co-Op. This cost was offset when calculating the use fee for the unit. The overall success of the new firm hired was excellent. By receiving accurate and timely crop scouting information, Cooperators were able to use IPM much more effectively.

Row crops on the Refuge during 1994 was:

Corn & Soybeans ---1095.0 acres

Oats --- 200.0 acres

Total Crop acres --- 1295.0 acres

Weather conditions were favorable for crop production. In general, fields were planted on schedule. Harvests produced higher than average yields for row crops.

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Cash rent continued as the method for Refuge farming. The system is designed to allow the Cooperator a reasonable rent on the ground while giving the government a good return on the operation. Rent ranges from \$60 to \$75 per acre, which is comparable to rents collected in the area for low quality ground. Rent figures were again derived taking into consideration yield data for each tract within the Refuge, average price per bushel of corn, and the cash rent guidelines established by the Jasper County Extension Office. Rent was collected in two installments, 30% due in May, with the balance due in December. Final rent figures are based on the Report of Planted Acres report each Cooperator turns in to the NRCS. Deductions from rent figures include the cost of crop scouting, \$10 per acre, mowing costs for buffer strips at \$12 per acre, and any chemical application for ground being planted back to native plants by the Refuge.

During the 1995 crop year Cooperators were allowed to use anhydrous ammonia in place of liquid nitrogen, required in the previous years. The main reason was the short supply of liquid nitrogen. Use of liquid nitrogen will be on a year-by-year basis.

Crop Scouting was utilized for the third year as a part of the IPM program on the Refuge. The same company was used, Farmers Co-Op Exchange of Prairie City. The cost of this service was \$10 per acre, paid by each Cooperator, through the deduction of cash rent. Success of this program has been very good, giving both the Refuge and cooperating farmers sound information and recommendations of the conditions of the crops. Row crops on the Refuge this year were 1,246 acres of corn and soybeans, a decrease of roughly 50 acres from crops in 1994.

Spring weather conditions were very wet, resulting in late planting. The wet weather subsided and a good harvest was gathered with few problems and slightly higher than average yield for the area.

1996/7

Cash rent continued as the method used for farming on the Refuge in 1996. Crop scouting also continued as a required part of this program.

Cropping on the Refuge was up slightly in 1996 due to new acquisitions. Cropped acres of corn and beans totaled 1,369 acres as compared to 1,246 in 1995.

1998

There were no major weed or insect problems relating to the farming program. Very wet spring weather delayed planting but otherwise crop production on the Refuge was as good as or slightly higher than on neighboring areas.

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Six special use permits were issued in fiscal year 1998. All of them were issued for our cooperative farm program. The farm program consisted of 313 acres of corn, 490 acres of soybean, and 20 acres of alfalfa.

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Crop scouting was utilized for the sixth year as a part of the Integrated Pest Management (IPM) program on the Refuge. The same company, Farmers Co-Op Exchange of Prairie City, was used. The cost of this service was \$5 per acre, paid by each Cooperator, through deduction of cash rent. Success of this program has been very good, giving both the Refuge and cooperating farms sound information and recommendations of the condition of the crops.

Spring weather conditions were quite wet, resulting in late planting. The Midwest saw a great growing season which produced extraordinary yields; unfortunately the grain prices were very low.

1999

Cash rent continued as the method used for Refuge farming. The system is designed to allow a reasonable rent on the land while giving the government good return on the operation. Rent ranges from \$60 to \$75 per acre which is comparable to rents collected in the area for low quality ground. Rent was collected in two installments, 30% due in May, and the balance due in December. Final rent figures are based on Report of Planted Acres which each Cooperator submits to the NRCS. Deductions from rent figures include cost of crop scouting at \$5 per acre, mowing costs for buffer strips at \$12 per acre, and any chemical application in preparation for ground being planted back to native plants by the Refuge.

Crop scouting was utilized as a part of the Integrated Pest Management (IPM) program on the Refuge. The same company was used as in previous years, Farmers Co-Op Exchange of Prairie City. As noted above, the cost of this service was paid by the Cooperator and then deducted from his cash rent. Success of this program has been very good, giving both the Refuge and the cooperating farmers sound information and recommendations regarding the condition of the crops.

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There was a total of 816.5 acres planted to corn, soybeans, or alfalfa. The Cooperative Farm Program acres continue to decline as we take out production to plant local ecotype seed.

2000

Cash rent continued as the method used for Refuge farming. The system is designed to allow the Cooperator a reasonable rent on the land while giving the government a good return on the operation. Rent ranges from \$60 to \$75.00 per acre which is comparable to rents collected in the area for low quality ground. Rent was collected in two installments, 30% due in May, with the balance due in December. Final rent figures are based on the Report of Planted Acres which each Cooperator submits to the NRCS. Deductions from rent figures include the cost of crop scouting at \$5.00 per acre, mowing costs for buffer strips at \$12.00 per acre, and any chemical application in preparation for ground being planted back to native plants by the Refuge.

Crop Scouting was utilized as a part of the Integrated Pest Management (IPM) program on the Refuge. The same company was used as in previous years, Farmers Co-Op Exchange of Prairie City. As noted above, the cost of this service was paid by the Cooperator and then deducted from their cash rent. Success of this program has been very good, giving both the Refuge and the cooperating farmers sound information and recommendations regarding the condition of the crops. This year, crop scouts identified an increase in leaf beetles that went above the allowable "threshold" level causing one farmer to conduct an additional spray sequence and thereby prevented further losses for the farmer and neighbors.

A total of 816.5 acres were planted to corn, soybeans, or alfalfa again this year with the cooperation of 7 local farmers. No additional farm land was planted to prairie; instead, many units already in prairie were over-seeded for increased diversity.

2001

Seven local farmers farmed 851 acres of Refuge lands under Special Use Permits. Agricultural lands are kept in crops until the Refuge is ready to convert them to prairie. The farming program is designed to allow the permittee a reasonable rent on the land while giving the government a good return on the operation. Permittees are required to use "no-till" farming practices and reduce the amount and kinds of chemicals applied to the land. Rent ranges from \$60 to \$75.00 per acre which is comparable to rents collected in the area for similar ground. Rent was collected in two installments with 30% due in May, and the balance due in December. Final rent figures are based on the Report of Planted Acres which each permittee submits to the Farm Services Agency (FSA).

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Deductions from rent figures include the cost of crop scouting at \$5.00 per acre, the cost of Precision Ag Services at \$7.50 per acre, mowing costs for buffer strips at \$12.00 per acre, and any chemical application in preparation for ground being planted back to native plants by the Refuge.

Crop Scouting was utilized as a part of the Integrated Pest Management (IPM) program on the Refuge. The Farmers Co-Op Exchange of Prairie City was used as in previous years. As noted above, the cost of this service was paid by the permittees and then deducted from their cash rent. Success of this program has been very good, giving both the Refuge and the cooperating farmers sound information and recommendations regarding the condition of the crops. Sometimes crop pests go above the allowable “threshold” levels and a chemical application needs to take place, thereby preventing further losses for the farmer and neighboring farms.

2002

Seven permits were issued to individuals to allow for cropping privileges during 2002. Seven local farmers managed approximately 850 acres of Refuge lands under Special Use Permits. The Refuge retired approximately 75 acres of row crops in its efforts to restore the tallgrass prairie ecosystem. Through this effort, two cooperators had their farming operation reduced. Also, we acquired another farm adding another cooperator and 38 acres into our farming operation.

Agricultural lands are kept in crops until the Refuge is ready to convert them to prairie. The farming program is designed to allow the permittee a reasonable rent on the land while giving the government a good return on the operation. Permittees are required to use No-till@ farming practices and reduce the amount and kinds of chemicals applied to the land. Rent ranges from \$60 to \$75 per acre which is comparable to rents collected in the area for similar ground. Rent was collected in two installments with 30% due in May, and the balance due in December. Final rent figures are based on the Report of Planted Acres which each permittee submits to the Farm Services Agency (FSA). Deductions from rent figures include the cost of crop scouting at \$5 per acre, the cost of Precision Ag Services at \$7.50 per acre, mowing costs for buffer strips at \$12 per acre, and any chemical application in preparation for ground being planted back to native plants by the Refuge.

Crop Scouting was utilized as a part of the Integrated Pest Management (IPM) program on the Refuge. The Farmers Co-Op Exchange of Prairie City was used as in previous years. As noted above, the cost of this service was paid by the permittees and then deducted from their cash rent. Success of this program has been very good, giving both the Refuge and the cooperating farmers sound information and recommendations regarding the condition of the crops. Sometimes crop pests go above the allowable threshold@ levels and a chemical application needs to take place, thereby preventing further losses for the farmer and neighboring farms.

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Seven permits were issued to individuals to allow for cropping privileges during 2003. Seven local farmers rented approximately 816 acres of refuge lands under Special Use Permits.

2003

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Crop Scouting was utilized as a part of the Integrated Pest Management (IPM) program on the refuge. Heartland Co-Op of Prairie City was used as in previous years. As noted above, the cost of this service was paid by the permittees and then deducted from their cash rent. Success of this program has been very good, giving both the refuge and the cooperating farmers sound information and recommendations regarding the condition of the crops. Sometimes crop pests go above the allowable threshold levels and a chemical application needs to take place, thereby preventing further losses for the farmer and neighboring farms.

2004

Six permits were issued to local farmers to allow for cropping privileges. These agreements provided agricultural rental on approximately 885 acres of Refuge land to seven farmers during 2004. Agricultural lands are kept in crops until the Refuge is ready to convert them to prairie. The farming program was designed to allow the permittee a reasonable rent on the land while giving the government a reasonable return. Permittees were required to meet special conditions which include using no-till farming practices, no fertilizer applications in the fall, limited herbicide options and other conservation friendly restrictions. Rents ranged from \$75 to \$90 per acre depending on the quality of soils and past crop yields. Rental rates were comparable to those collected in the area for similar ground according to the ISU Extension Office. Rent was collected in two installments with 30% due in May, and the balance due in December. Final rent totals are based on

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the Report of Planted Acres which each permittee submits to the Farm Services Agency (FSA). Rent collected in 2004 will exceed \$60,000. Success of this program has been very good, giving both the Refuge and the farm operators a good value while meeting land management objectives. In 2004 approximately 250 acres will be retired from the farming program and planted to prairie.

(December 2004 – FY 2005)

Hager met with farmers to explain next year's rental program, any changes, pesticide use proposals, discussion of soybean rust. There will be around 650 acres rented this year.

2005

January 2005

For the month, 370 people were recorded as walk-ins to the Prairie Learning Center. That represents a slight drop from the 435 noted a year ago this month. Severe winter weather across the state with snowy and icy road conditions common each week may be the most plausible explanation for the decline. Another 2,048 folks were tallied on the refuge trails and auto tour route. 50 individuals participated in meetings held on-site. Several scouting programs were conducted in January, but the seasonal drop-off in school children attending field trips to the refuge was precipitous, just as it is in other school years. The "down time" for school groups provides the public use staff with good timing for training and refresher sessions, as well as project planning meetings.

Below and Rich started winter inspections of FmHA easements. No violations were found. One easement farmer was contacted about possibly fencing an easement and he was very receptive to the idea. Rich will continue to work with this landowner to accomplish the fencing.

April 2005

Hager worked with several farmers to get the 2005 farm program going.

Hager coordinated research projects on farm units. He also ensured that the first rental installments were paid on time, and checked the fields for permit compliance.

May 2005

Cooperative farmers submitted their first portion payments for farming privileges during 2005 crop year.

October 2005

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Hager coordinated with FSA to certify planted acres on leased refuge lands. The report will be used to determine rental fees collected in December.

December 2005

Hager met with the five farmers who are renting farm land on the refuge. He discussed yield, pesticide use and the retirement of 197 acres this coming fall. He explained the long range plan to have all farm land retired by the end of 2008. Dykstra collected the remainder of the payments totaling \$31,361.50.

2006

February 2006

Also, permits were prepared for six cooperative farmers for crop year 2006.

March 2006

Drobney, Hager, and Gilbertson met with Agro-ecosystem researchers and refuge farmers to identify someone interested in performing farm work for the project. All farmers at the meeting were interested in participating in a research/ag working group. Two were interested in conducting farming.

April 2006

LMRD biologist coordinated a meeting involving Gilbertson, Hager, and Agro-ecosystem researchers, and NSM farmers to identify someone to perform farm work on 12 catchments on the refuge. An additional outcome was that all farmers present were interested in being members of a working/advisory group relating to this research.

June 2006

Hager inspected crop fields to insure compliance with permits and coordinated with farmers to keep them informed of research and installation of equipment on leased ground.

October 2006

Farming permittees completed harvest without incident.

2007

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March 2007

Special use permits were prepared for the three remaining farmers for their 2007 cropping agreements.

May 2007

Hager handled permits and collected rent from cooperative farmers.

2008

February 2008

Three cooperative farmers were issued special use permits for 2008 farming privileges.

December 2008

Coop farmers paid their last rental for the year. Three renters are left out of seven since 1998.

2009

January 2009

Hager prepared documents for the refuge farming plan.

February 2009

Cooperative Farmers (Gary Van Ryswyk, Gerald Vander Linden and Gordon Wassenaar) were given special use permits for the 2009 farming season. They were asked to review the information and sign prior to beginning field work.
